

Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – WO66-G609 Silver Spring, MD 20993-0002

April 3, 2015

L&K Biomed Co., Ltd. Ms. Yerim An #201, 202 16-25, Dongbaekjungang-ro 16 beon-gil Giheung-gu, Yongin-si Geyonggi-do, 446-916 Korea

Re: K143360

Trade/Device Name: LnK Cervical Interbody Fusion Cage System

Regulation Number: 21 CFR 888.3080

Regulation Name: Intervertebral body fusion device

Regulatory Class: Class II Product Code: ODP Dated: March 19, 2015 Received: March 23, 2015

Dear Ms. An:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing

(21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<u>http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm</u> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Mark N. Melkerson -S

Mark N. Melkerson Director Division of Orthopedic Devices Office of Device Evaluation Center for Devices and Radiological Health

Enclosure

## **Indications for Use Statement**

510(	k)	Number (	if known)	: K143360
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Device Name: LnK Cervical Interbody Fusion Cage System

## **Indications For Use:**

LnK Cervical Interbody Fusion Cage System is indicated for use in skeletally mature patients with degenerative disc disease (DDD) of the cervical spine with accompanying radicular symptoms at one disc level. DDD is defined as discogenic pain with degeneration of the disc confirmed by patient history and radiographic studies. LnK Cervical Interbody Fusion Cage System is used to facilitate intervertebral body fusion in the cervical spine at the C3 to C7 disc levels using autograft bone. LnK Cervical Interbody Fusion Cage System is to be used with supplemental fixation. Patients should have at least six (6) weeks of non-operative treatment prior to treatment with an intervertebral cage.

Prescription Use	AND/OR	Over-The-Counter Use
(Part 21 CER801 Subpart D)		(21 CER801 Subpart C)
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Concurrence	ce of CDRH, Office of	Device Evaluation (OED)

# **510(k) SUMMARY**

The following 510(k) summary is being submitted as required by 21 CFR 807.92:

**1. Submitter:** Gook Jin Kang

L&K BIOMED Co., Ltd.

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Phone. 82-2-6717-1985 FAX .82-2-6717-1989

**Contact Person:** Yerim An

**Date prepared:** March 19, 2015

# 2. Device Identification

Trade Name LnK Cervical Interbody Fusion Cage System

Common Name Intervertebral Body Fusion Device

Product Code ODP

Classification Class II

Classification Name Intervertebral body fusion device

21 CFR 888.3080

# 3. Predicate or legally marketed devices which are substantially equivalent

• **L&K BIOMED Co., Ltd**: LnK Cervical Interbody Fusion Cage System(K120840)

## 4. Description of the Device

LnK Cervical Interbody Fusion Cage System intended for use as an interbody fusion cage device and must be used with supplemental fixation. The devices are available in a variety of different sizes and configurations to accommodate anatomical variation in different vertebral levels and/or patient anatomy. The devices are made of PEEK-OPTIMA® LTl with marker pins made of Unalloyed Tantalum.

#### 5. Intended use

LnK Cervical Interbody Fusion Cage System is indicated for use in skeletally mature patients with degenerative disc disease (DDD) of the cervical spine with accompanying radicular symptoms at one disc level. DDD is defined as discogenic pain with degeneration of the disc confirmed by patient history and radiographic studies. LnK Cervical Interbody Fusion Cage System is used to facilitate intervertebral body fusion in

the cervical spine at the C3 to C7 disc levels using autograft bone. LnK Cervical Interbody Fusion Cage System is to be used with supplemental fixation. Patients should have at least six (6) weeks of non-operative treatment prior to treatment with an intervertebral cage.

# 6. Comparison of the technology characteristics of the device to predicate and legally marketed devices

		LnK Cervical Interbody	LnK Cervical Interbody
No	Item	Fusion Cage System	Fusion Cage System
			(Predicate)
1	Manufacturer	L&K BIOMED Co., Ltd.	L&K BIOMED Co., Ltd.
2	Material	PEEK and Tantalum	PEEK and Tantalum
3	510(K) Number	K143360	K120840
4	Product Code	ODP	ODP
5	Class	ClassII	ClassII
6	Intended Use	LnK Cervical Interbody	LnK Cervical Interbody
		Fusion Cage System is	Fusion Cage System is
		indicated for use in skeletally	indicated for use in skeletally
		mature patients with	mature patients with
		degenerative disc disease	degenerative disc disease
		(DDD) of the cervical spine	(DDD) of the cervical spine
		with accompanying radicular	with accompanying radicular
		symptoms at one disc level.	symptoms at one disc level.
		DDD is defined as discogenic	DDD is defined as discogenic
		pain with degeneration of the	pain with degeneration of the
		disc confirmed by patient	disc confirmed by patient
		history and radiographic	history and radiographic
		studies. LnK Cervical	studies. LnK Cervical
		Interbody Fusion Cage	Interbody Fusion Cage
		System is used to facilitate	System is used to facilitate
		intervertebral body fusion in	intervertebral body fusion in
		the cervical spine at the C3 to	the cervical spine at the C3 to
		C7 disc levels using autograft	C7 disc levels using autograft
		bone. LnK Cervical Interbody	bone. LnK Cervical Interbody
		Fusion Cage System is to be	Fusion Cage System is to be
		used with supplemental	used with supplemental
		fixation. Patients should have	fixation. Patients should have
		at least six (6) weeks of non-	at least six (6) weeks of non-
		operative treatment prior to	operative treatment prior to
		treatment with an	treatment with an
		intervertebral cage.	intervertebral cage.
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#### 7. Performance Data

Mechanical performance of additional components of LnK Cervical Interbody Fusion Cage System is same with predicated LnK Cervical Interbody Fusion Cage System(K120840). They are same product in all aspect, except sterilization. Sterilization method is gamma irradiation which is following ISO 11137. It is widely known that gamma irradiation sterilization is not effect on mechanical performance. Therefore, We substitute mechanical test data of additional components of LnK Cervical Interbody Fusion Cage System with it of LnK Cervical Interbody Fusion Cage System(K120840).

The LnK Cervical Interbody Fusion Cage System was tested according to the ASTM F 2077, specifically, Static and Dynamic Axial Compression, Static and Dynamic Compression-Shear Testing, Static and Dynamic Torsion Testing, Expulsion Testing and Static Subsidence testing under Axial Compression, per ASTM F 2267.

## 8. Conclusion

The additional components of LnK Cervical Interbody Fusion Cage System is substantially equivalent to the device referenced above and is therefore safe and effective for its intended use.